

Amendments to the Claims

This Listing of Claims replaces all prior versions, and listings, of claims in this application.

1- 28 (Cancelled).

29. (New) An electrophoresis apparatus, comprising:
a transport capillary into which a sample can be introduced;
a separation capillary having a capillary overlapping portion overlapping at generally a right angle with a portion of the transport capillary;
an analyte concentrator in the capillary overlapping portion to concentrate at least one analyte of interest from the sample introduced into the transport capillary; and
detector means for identifying and characterizing the at least one analyte of interest delivered thereto by the separation capillary.

30. (New) An electrophoresis apparatus, comprising:
a transport conduit into which a sample can be introduced and through which the sample can be conveyed;
a separation conduit in fluid communication with the transport conduit;
a cruciform-configured intersection defined by the intersection of the transport conduit and the separation conduit; and
analyte concentrator means in the intersection for concentrating an analyte of interest from the sample for subsequent conveyance in the separation capillary to a detector.

31. (New) An electrophoresis apparatus, comprising:
a transport conduit;
a detector system to identify and characterize first and second analytes of interest;
first separation conduit means for conveying the first analyte of interest concentrated from a sample transported in the transport conduit at a first location of the

transport conduit to the detector system; and

second separation conduit means for conveying the second analyte of interest concentrated from the sample at a second location of the transport conduit to the detector system.

32. (New) An electrophoresis apparatus, comprising:

a transport capillary;

a separation capillary in fluid communication with and intersecting the transport capillary; and

affinity means for attracting and concentrating at the intersection of the transport and separation capillaries at least one analyte of interest from a sample introduced into the transport capillary and allowing the concentrated analyte to be subsequently conveyed in the separation capillary to a detector.

33. (New) An electrophoresis apparatus, comprising:

a transport channel for transporting a sample;

concentrating means for concentrating a first analyte from the sample as the sample is transported in the transport channel and for concentrating a second analyte from the sample as the sample is transported in the transport channel;

first separation capillary means for conveying the first concentrated analyte away from the transport channel and to a detector system; and

second separation capillary means spaced from the first separation capillary means for conveying the second concentrated analyte away from the transport channel and to the detector system.

34. (New) An electrophoresis apparatus, comprising:

a transport capillary having a first area and a second area;

a first separation capillary in fluid communication with the transport capillary at the first area;

a second separation capillary in fluid communication with the transport capillary at the second area;

a first analyte concentrator at the first area to concentrate a first analyte from a

sample introduced into the transport capillary and allowing the first analyte thereby concentrated to be subsequently conveyed in the first separation capillary to an analyte detector zone; and

a second analyte concentrator at the second area to concentrate a second analyte from the sample and allowing the second analyte thereby concentrated to be subsequently conveyed in the second separation capillary to the analyte detector zone.

35. (New) An electrophoresis apparatus, comprising:

a transport conduit having an inlet into which a sample can be introduced and an outlet;

a separation conduit having an overlapping conduit portion overlapping with a portion of the transport conduit between the inlet and the outlet;

an analyte concentrator in the overlapping conduit portion to concentrate at least one analyte of interest from the sample as the sample passes from the inlet to the outlet; and

detecting means for identifying and characterizing the at least one analyte of interest concentrated by the analyte concentrator and subsequently conveyed thereto in the separation conduit.